SPECIAL VOLUME

FIRST JAPAN CONFERENCE ON GRAPH THEORY AND APPLICATIONS

Guest Editors: J. AKIYAMA, Y. EGAWA and H. ENOMOTO

CONTENTS

PREFACE 1

Y. ALAVI, F. BUCKLEY, M. SHAMULA and S. RUIZ, Highly irregular m-chromatic graphs 3

N. ALON and F. R. K. CHUNG, Explicit construction of linear sized tolerant networks 15

B. BOLLOBÁS, Sorting in rounds 21

C. C. CHEN, On edge-Hamiltonian property of Cayley graphs 29

E. J. COCKAYNE, S. T. HEDETNIEMI and R. LASKAR, Gallai theorems for graphs, hypergraphs, and set systems 35

C.J. COLBOURN, Edge-packings of graphs and network reliability 49

I.J. DEJTER, J. CORDOVA and J.A. QUINTANA, Two Hamilton cycles in bipartite reflective Kneser graphs 63

C.-L. DENG and C.-K. LIM, A result on generalized Latin rectangles 71

P. ERDÖS, Problems and results in combinatorial analysis and graph theory 81

P. ERDÖS, R.J. FAUDREE and E.T. ORDMAN, Clique partitions and clique coverings 93

P. ERDÖS, R.J. FAUDREE, C.C. ROUSSEAU and R.H. SCHELP, Extremal theory and bipartite graph-tree Ramsey numbers 103

S. FAJTLOWICZ, On conjectures of Graffiti 113

R.J. FAUDREE, C.C. ROUSSEAU and R.H. SCHELP, Small order graph-tree Ramsey numbers 119

L.R. FOULDS and R.W. ROBINSON, Enumerating phylogenetic trees with multiple labels 129

O. FRANK, Triad count statistics 141

S.V. GERVACIO, Score sequences: lexicographic enumeration and tournament construction 151

J.R. GRIGGS, Problems on chain partitions 157

Y.O. HAMIDOUNE and M. LAS VERGNAS, A solution to the Misère Shannon switching game 163

T. HIBI, H. NARUSHIMA, M. TSUCHIYA and K. WATANABE, A graph-theoretical characterization of the order complexes on the 2-sphere 167

C. HOEDE, Hard graphs for the maximum clique problem 175

N. ITO, Doubly regular asymmetric digraphs 181

Y. KAJITANI, S. UENO and H. MIYANO, Ordering of the elements of a matroid such that its consecutive w elements are independent 187

F. KITAGAWA and H. IKEDA, An existential problem of a weight-controlled subset and its application to school timetable construction 195

W.L. KOCAY and Z.M. LUI, More non-reconstructible hypergraphs 213

K.M. KOH and K.S. POH, Constructions of sensitive graphs which are not strongly sensitive 225

P. LEROUX and G.X. VIENNOT, Combinatorial resolution of systems of differential equations. IV. Separation of variables 237

F. LOUPEKINE and J.J. WATKINS, Labeling angles of planar graphs 251
T. LUCZAK and Z. PALKA, Maximal induced trees in sparse random graphs 257
W. MADER, Generalizations of critical connectivity of graphs 267
H. MAEHARA, On the Euclidean dimension of a complete multipartite graph 285
I. MIYAMOTO, Computation of some Cayley diagrams 291
T. NISHIMURA, Short cycles in digraphs 295
K. NOWICKI and J.C. WIERMAN, Subgraph counts in random graphs using incomplete U-statistics methods 299
M.D. PLUMMER, Toughness and matching extension in graphs 311
K.B. REID, Bipartite graphs obtained from adjacency matrices or orientations of graphs 321
M.-J.P. RUIZ, C_n-factors of group graphs 331
M.M. SYSLO, An algorithm for solving the jump number problem 337
H.H. TEH and M.F. FOO, Large scale network analysis with applications to transportation, communication and inference networks 347
S. UENO, Y. KAJITANA and S. GOTOH, On the nonseparating independent set problem and feedback set problem for graphs with no vertex degree exceeding three 355
K. USHIO, P_3-factorization of complete bipartite graphs 361
A. VINCE, n-graphs 367
J. WANG, On point-linear arboricity of planar graphs 381
T. WATANABE, On the Littlewood–Richardson rule in terms of lattice path combinatorics 385
E.G. WHITEHEAD, Jr., Chromatic polynomials of generalized trees 391
H.P. YAP, Packing of graphs – A survey 395
ZHANG Fu-Ji, X. GUO and R.-S. CHEN, Z-transformation graphs of perfect matchings of hexagonal systems 405

AUTHOR INDEX 417